

## **REMARKS**

The Office Action mailed July 29, 2009 has been received and reviewed. Prior to the present communication, claims 1-15 and 18-49 were pending in the subject application. All claims stand rejected. Each of claims 1,2,4, 8, 9, 12-15, 18-20, 23, 24, 26, 27 and 33-49 has been amended herein and claims 3, 25 and 32 have been canceled. As such, claims 1, 2, 4-15, 18-24, 26-31 and 33-49 remain pending. Care has been exercised to introduce no new subject matter. Reconsideration of the above-identified application in view of the above amendments and the following remarks is respectfully requested.

### **Rejections based on 35 U.S.C. § 101**

Claims 18-30 and 33-49 have been rejected under 35 U.S.C. § 101 because they are ostensibly directed to non-statutory subject matter. Claim 25 has been canceled, rendered the rejection of claim 25 moot.

### **Claims 18-24, 26-30, and 33**

With respect to claims 18-24, 26-30, and 33, the claims are stated to be “claiming functional descriptive material (i.e., software).” Independent claim 18 has been amended herein to recite, in part, “[a] computerized advertisement delivery system embodied on one or more computer-storage media having computer-executable instructions embodied thereon for processing advertisement requests, . . . .” Accordingly, it is respectfully submitted that independent claim 18, as amended, overcomes the 35 U.S.C. § 101 rejection thereof. Each of claims 19-24, 26-30 and 33 depends, either directly or indirectly, from amended independent claim 18. As such, it is respectfully submitted that the 35 U.S.C. § 101 rejection of these claims

has been overcome as well for at least the above-stated reasons. Accordingly, Applicants respectfully request the 35 U.S.C. § 101 rejection of claims 18-24, 26-30, and 33 be withdrawn.

**Claims 34-49**

With respect to claims 34-49, independent claim 34 has been amended herein to recite, in part, “[o]ne or more computer-storage media having computer-executable components embodied thereon that, when executed by a computing device, perform a method for estimating available advertisement inventory, . . .” Accordingly, it is respectfully submitted that independent claim 34, as amended, overcomes the 35 U.S.C. § 101 rejection thereof. Each of claims 35-49 depends, either directly or indirectly, from amended independent claim 34. As such, it is respectfully submitted that the 35 U.S.C. §101 rejection of these claims has been overcome as well for at least the above-stated reasons. Accordingly, Applicants respectfully request the 35 U.S.C. § 101 rejection of claims 34-49 be withdrawn.

**Rejections based on 35 U.S.C. § 112**

Claims 18-30 and 33-49 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claim 25 has been canceled, thus rendering the rejection of claim 25 moot. It is stated in the outstanding Office Action that claims 18-24, 26-30, and 33 “are indefinite because they are system claims and claims 34-49 are indefinite because they are claiming a proper computer readable medium.” *Office Action* dated 7/29/2009 at p. 3.

Claims 18-24, 26-30, and 33

As previously set forth, independent claim 18 has been amended herein to recite, in part, “[a] computerized advertisement delivery system embodied on one or more computer-storage media having computer-executable instructions embodied thereon for processing advertisement requests, . . .” Support for the amendments to claim 18 is found at least at page 10, line 22 to page 11, line 2 of the Specification as originally filed. It is respectfully submitted that independent claim 18, as amended, overcomes the 35 U.S.C. § 112, second paragraph, rejection thereof. Each of claims 19-24, 26-30 and 33 depends, either directly or indirectly, from amended independent claim 18. As such, it is respectfully submitted that the 35 U.S.C. §112, second paragraph, rejection of these claims has been overcome as well for at least the above-stated reasons. Accordingly, Applicants respectfully request the 35 U.S.C. § 112, second paragraph, rejection of claims 18-24, 26-30, and 33 be withdrawn.

Claims 34-49

As previously set forth, independent claim 34 has been amended herein to recite, in part, “[o]ne or more computer-storage media having computer-executable components embodied thereon that, when executed by a computing device, perform a method for estimating available advertisement inventory, . . .” Accordingly, it is respectfully submitted that independent claim 34, as amended, overcomes the 35 U.S.C. § 112, second paragraph, rejection thereof. Each of claims 35-49 depends, either directly or indirectly, from amended independent claim 34. As such, it is respectfully submitted that the 35 U.S.C. §112, second paragraph, rejection of these claims has been overcome as well for at least the above-stated reasons. Accordingly, Applicants respectfully request the 35 U.S.C. § 112, second paragraph, rejection of claims 34-49 be withdrawn.

### **Rejections based on 35 U.S.C. § 103**

Title 35 U.S.C. § 103(a) declares that a patent shall not issue when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” The Supreme Court in *Graham v. John Deere* counseled that an obviousness determination is made by identifying the scope and content of the prior art, the level of ordinary skill in the prior art, the differences between the claimed invention and prior art references, and secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

To support a finding of obviousness, the initial burden is on the Office to establish the clear articulation of the reason(s) why the claimed invention would have been obvious. *See* MPEP § 2142. The analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. *See* MPEP § 2143; *See also KSR v. Teleflex*, 127 S. Ct. 1727 (2007). In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *See* MPEP § 2141.02(I).

To reach a proper determination of obviousness, the Examiner must step backward in time and into the shoes worn by the hypothetical “person of ordinary skill in the art” when the invention was unknown and just before it was made. In view of all factual information, the Examiner must then determine whether the claimed invention “as a whole” would have been obvious at that time to that person. Knowledge of applicant’s disclosure must be put aside in reaching this determination. Impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art. *See* MPEP § 2142.

Claims 1-15 and 18-49 have been rejected under 35 U.S.C. §103(a) as being anticipated by U.S. Patent Publication No. 2002/0042821 to Muret (hereinafter “Muret”) in view of U.S. Patent No. 6,654,725 to Langheinrich (hereinafter “Langheinrich”). Claims 3, 25 and 32 have been canceled by way of the present communication, thus rendering the rejection of these claims moot. As Muret in view of Langheinrich fails to teach or suggest all of the limitations set forth in rejected claims 1, 2, 4-15, 18-24, 26-31 and 33-49, Applicants respectfully traverse the rejection of these claims, as hereinafter set forth.

Independent claim 1

Independent claim 1, as amended herein, provides a method for estimating appropriate advertisement inventory. The method comprises obtaining one or more advertisement target market segment criteria from an advertiser for delivering at least one advertisement. The method further comprises, utilizing a first computing process, generating a target market segment array corresponding to each of the one or more advertisement target market segment criteria. Each target market segment array includes a plurality of array elements, each array element corresponding to a period of time. Additionally, an advertisement request is obtained from one of a user and a content provider. The advertisement request includes one or more target market data elements and is associated with a time. Upon determining that at least one of the one or more target market data elements corresponds to a particular one of the one or more advertisement target market segment criteria obtained from the advertiser, a numerical identifier is incremented in one or more of the plurality of array elements included in the target market segment array that corresponds to the particular one of the one or more advertisement target market segment criteria, utilizing a second computing process. Still further, the method comprises processing a plurality of numerical identifiers incremented in association with the one

or more target market segment arrays to determine appropriate advertisement inventory at a particular time. In this claimed embodiment, the first and second computing processes are performed by one or more computing devices. Support for the amendments to claim 1 may be found at least at claim 3 of the Specification as originally filed.

In contrast to amended independent claim 1, which provides a method for estimating appropriate advertisement inventory, Muret provides methods for evaluating the return-on-investment of advertisements through network monitoring. As such, Muret is distinguished from the invention of claim 1 in a number of ways.

For example, Muret fails to teach or suggest “determining that at least one of the one or more target market data elements corresponds to a particular one of the one or more advertisement target market segment criteria obtained from the advertiser,” as recited in amended independent claim 1. In contrast, Muret provides a visitor monitor report. *See Muret* at ¶¶ [0218]-[0219]. While the visitor monitor report described in Muret is unclear, it lists data parameters as “visitors, pages, hits, bytes, and information.” *Id.* at ¶ [0214]. However, Muret completely fails to teach or suggest determining that target market data elements correspond to advertisement target market segment criteria obtained from an advertiser, as recited in amended independent claim 1. Accordingly, it is respectfully submitted that Muret fails to teach or suggest “determining that at least one of the one or more target market data elements corresponds to a particular one of the one or more advertisement target market segment criteria obtained from the advertiser,” as recited in amended independent claim 1.

Muret also fails to teach or suggest “incrementing a numerical identifier in one or more of the plurality of array elements included in the target market segment array that corresponds to the particular one of the one or more advertisement target market segment

criteria,” as recited in amended independent claim 1. In fact, Muret is completely silent on the use of numerical identifiers. While Muret does ostensibly provide the use of data parameters, as discussed above, Muret fails to teach or suggest the use, source, or purposes of the data parameters listed. Further, Muret fails to teach or suggest the inclusion of a numerical identifier into one or more of a plurality of array elements. As such, it is respectfully submitted that Muret fails to teach or suggest “incrementing a numerical identifier in one or more of the plurality of array elements included in the target market segment array that corresponds to the particular one of the one or more advertisement target market segment criteria,” as recited in amended independent claim 1.

Further, Muret fails to teach or suggest “processing a plurality of numerical identifiers incremented in association with the one or more target market segment arrays to determine appropriate advertisement inventory at a particular time,” as recited in amended independent claim 1. For reasons discussed above, Muret fails to teach or suggest the use of numerical identifiers. Additionally, Muret is completely silent on determining appropriate advertisement inventory. Rather, Muret is concerned with determining the effectiveness of advertisements. Accordingly, it is respectfully submitted that Muret fails to teach or suggest “processing a plurality of numerical identifiers incremented in association with the one or more target market segment arrays to determine appropriate advertisement inventory at a particular time,” as recited in amended independent claim 1.

In further contrast to the invention recited in amended independent claim 1, Langheinrich discloses a system and method for providing customized advertisements on demand. It is respectfully submitted that Langheinrich fails to teach a number of limitations recited in amended independent claim 1, as well.

For example, Langheinrich fails to teach or suggest “incrementing a numerical identifier in one or more of the plurality of array elements included in the target market segment array that corresponds to the particular one of the one or more advertisement target market segment criteria,” as recited in amended independent claim 1. Similar to Muret, Langheinrich is completely silent on the use of numerical identifiers. Rather, Langheinrich creates customized advertisements on demand. Additionally, Langheinrich states “[n]o identifiable data is collected during the interaction with the user.” *Langheinrich*, Abstract. As such, Langheinrich fails to teach or suggest the use of a tracking numerical identifier. Further, Langheinrich fails to teach or suggest the inclusion of a numerical identifier into one or more of a plurality of array elements. As such, it is respectfully submitted that Langheinrich fails to teach or suggest “incrementing a numerical identifier in one or more of the plurality of array elements included in the target market segment array that corresponds to the particular one of the one or more advertisement target market segment criteria,” as recited in amended independent claim 1.

Further, Langheinrich fails to teach or suggest “processing a plurality of numerical identifiers incremented in association with the one or more target market segment arrays to determine appropriate advertisement inventory at a particular time,” as recited in amended independent claim 1. For reasons discussed above, Langheinrich fails to teach or suggest the use of numerical identifiers. Additionally, Langheinrich is completely silent on determining appropriate advertisement inventory, since Langheinrich provides customized advertisements on demand. Accordingly, it is respectfully submitted that Langheinrich fails to teach or suggest “processing a plurality of numerical identifiers incremented in association with the one or more target market segment arrays to determine appropriate advertisement inventory at a particular time,” as recited in amended independent claim 1.

For at least the above-cited reasons, it is respectfully submitted that Muret in view of Langheinrich fails to teach or suggest each and every element as set forth in amended independent claim 1. Accordingly, Muret and Langheinrich, whether taken alone or in combination, fail to teach or suggest each limitation of this claim. As such, Applicants respectfully submit that claim 1, as amended, overcomes the 35 U.S.C. § 103(a) rejection thereof. Accordingly, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of claim 1 be withdrawn. Each of dependent claims 2, 4-17 and 31 depends, either directly or indirectly, from amended independent claim 1. Additionally, support for amendments to claims 3 and 14 may be found at least at claim 1 of the Specification as originally filed. Accordingly, it is respectfully submitted that these claims are not obvious over Muret in view of Langheinrich for at least the above-cited reasons. As such, withdrawal of the 35 U.S.C. § 103(a) rejection of these claims is respectfully requested as well. Each of claims 1, 2, 4-17, and 31 is believed to be in condition for allowance and such favorable action is respectfully requested.

Independent claim 18

Independent claim 18, as amended herein, provides a computerized advertisement delivery system embodied on one or more computer-storage media having computer-executable instructions embodied thereon for processing advertisement requests, the advertisement requests each being associated with one or more target market data elements. The system comprises an advertisement client component operable to obtain one or more advertisement target market segment criteria from an advertiser for delivering at least one advertisement and generate a target market segment array corresponding to each of the one or more advertisement target market segment criteria. Each target market segment array includes a plurality of array elements, each array element corresponding to a period of time. The advertisement client component is

further operable to obtain an advertisement request from one of a user and a content provider, the advertisement request including one or more target market data elements, and to increment a numerical identifier in one or more of the plurality of array elements corresponding to a time associated with the advertisement request. The system further comprises an advertisement processing component operable to parse an advertisement associated with the advertisement request and estimate available advertisement inventory and an advertisement manager component operable to obtain atomic market segment data by evaluating the one or more advertisement target market segment criteria using the target market segment arrays and to process the atomic market segment data for at least one of capacity planning and inventory management. Support for amendments to claim 18 may be found at least at page 15, lines 17-28 and page 16, lines 1-8 of the Specification as originally filed.

In contrast to amended independent claim 18, which provides a computerized advertisement delivery system for processing advertisement requests, Muret provides methods for evaluating the return-on-investment of advertisements through network monitoring. In further contrast to the invention of amended independent claim 18, Langheinrich discloses a method for customizing advertisements on demand. As such, it is respectfully submitted that Muret in view of Langheinrich is distinguished from the invention recited in amended independent claim 18 in a number of ways.

For example, Muret in view of Langheinrich fails to teach or suggest “an advertisement client component operable to obtain one or more advertisement target market segment criteria from an advertiser for delivering at least one advertisement and generate a target market segment array corresponding to each of the one or more advertisement target market segment criteria, *wherein each target market segment array includes a plurality of array*

*elements, . . . and increment a numerical identifier in one or more of the plurality of array elements corresponding to a time associated with the advertisement request,”* as recited in amended independent claim 18 (emphasis added). In fact, for reasons discussed above, Muret in view of Langheinrich is completely silent on the use of numerical identifiers. While Muret does ostensibly provide the use of data parameters, as discussed above, Muret fails to teach or suggest the use, source, or purposes of the data parameters listed. Further, Muret fails to teach or suggest the inclusion of a numerical identifier into one or more of a plurality of array elements.

Similar to Muret, Langheinrich is completely silent on the use of numerical identifiers. Rather, Langheinrich creates customized advertisements on demand. Additionally, Langheinrich states “[n]o identifiable data is collected during the interaction with the user.” *Langheinrich, Abstract.* As such, Langheinrich fails to teach or suggest the use of a tracking numerical identifier. Further, Langheinrich fails to teach or suggest the inclusion of a numerical identifier into one or more of a plurality of array elements. As such, Muret in view of Langheinrich fails to teach or suggest “an advertisement client component operable to obtain one or more advertisement target market segment criteria from an advertiser for delivering at least one advertisement and generate a target market segment array corresponding to each of the one or more advertisement target market segment criteria, wherein each target market segment array includes a plurality of array elements, . . . and increment a numerical identifier in one or more of the plurality of array elements corresponding to a time associated with the advertisement request,” as recited in amended independent claim 18.

Additionally, Muret in view of Langheinrich fails to teach or suggest “an advertisement processing component operable to parse an advertisement associated with the advertisement request and estimate available advertisement inventory,” as recited in amended

independent claim 18. Rather, Muret provides a method for parsing log files and “keep[ing] that data associated with the visitor that generated it.” *Muret*, [0055]. In contrast, the invention of amended independent claim 18 parses information for future inventory processing. Further, Muret and Langheinrich completely fail to teach or suggest estimating available advertisement inventory, as recited in amended independent claim 18. Rather, Muret is concerned with evaluating the performance of advertisements, and Langheinrich is concerned with customizing advertisements on demand.

Further, Muret in view of Langheinrich also fails to teach or suggest “an advertisement manager component operable to obtain atomic market segment data by evaluating the one or more advertisement target market segment criteria using the target market segment arrays and to process the atomic market segment data for at least one of capacity planning and inventory management,” as recited in amended independent claim 18. Rather, as discussed above, Muret is concerned with evaluating the performance of advertisements, and Langheinrich is concerned with customizing advertisements on demand. Accordingly, Muret in view of Langheinrich fails to teach or suggest an advertisement manager component operable to obtain atomic market segment data by evaluating the one or more advertisement target market segment criteria using the target market segment arrays and to process the atomic market segment data for at least one of capacity planning and inventory management,” as recited in amended independent claim 18.

For at least the above-cited reasons, it is respectfully submitted that Muret in view of Langheinrich fails to teach or suggest all of the limitations set forth in amended independent claim 18. Accordingly, Muret in view of Langheinrich fails to teach or suggest each limitation of this claim. As such, Applicants respectfully submit that claim 18, as amended, overcomes the

35 U.S.C. § 103(a) rejection thereof. Accordingly, Applicants respectfully request the 35 U.S.C. § 103(a) rejection of claim 18 be withdrawn. Each of dependent claims 19-24, 26-29, and 33 depends, either directly or indirectly, from amended independent claim 18 and, accordingly, it is respectfully submitted that these claims are non-obvious over Muret in view of Langheinrich for at least the above-cited reasons. As such, withdrawal of the 35 U.S.C. § 103(a) rejection of these claims is respectfully requested as well. Each of claims 18-24, 26-29, and 33 is believed to be in condition for allowance and such favorable action is respectfully requested.

Independent claim 34

Independent claim 34, as amended herein, provides one or more computer-storage media having computer-executable components embodied thereon that, when executed by a computing device, perform a method for estimating available advertisement inventory. The computer-storage media comprises a payload processing component operable to obtain one or more advertisement target market segment criteria corresponding to an advertisement request and generate one or more target market segment arrays corresponding to each advertisement target market segment criterion wherein each target market segment array includes a plurality of array elements corresponding to periods of time. The payload processing component is further operable to obtain an advertisement request associated with a time, the advertisement request including one or more target market data elements, and to increment a numerical identifier in the plurality of array elements corresponding to the time associated with the advertisement request. The computer-storage media further comprises a payload manager operable to evaluate the one or more advertisement target market segment criteria using the one or more target market segment arrays and to process data within the one or more target market segment arrays to estimate available advertisement inventory.

In contrast to independent claim 34, which provides components for estimating available inventory, Muret provides methods for evaluating the return-on-investment of advertisements through network monitoring. In further contrast to the invention recited in amended independent claim 34, Langheinrich discloses a method for customizing advertisements on demand.

For example, Muret in view of Langheinrich fails to teach or suggest a “payload processing component operable to obtain an advertisement request associated with a time, the advertisement request including one or more target market data elements, and to increment a numerical identifier in the plurality of array elements corresponding to the time associated with the advertisement request,” as recited in amended independent claim 34. In fact, for reasons discussed above, Muret in view of Langheinrich is completely silent on the use of numerical identifiers. While Muret does ostensibly provide the use of data parameters, as discussed above, Muret fails to teach or suggest the use, source, or purposes of the data parameters listed. Further, Muret fails to teach or suggest the inclusion of a numerical identifier into one or more of a plurality of array elements.

Further, Muret and Langheinrich completely fail to teach or suggest a “payload manager operable to evaluate the one or more advertisement target market segment criteria using the one or more target market segment arrays and to process data within the one or more target market segment arrays to estimate available advertisement inventory,” as recited in amended independent claim 34. Rather, Muret is concerned with evaluating the performance of advertisements, and Langheinrich is concerned with customizing advertisements on demand. Accordingly, Muret in view of Langheinrich fails to teach or suggest a “payload manager

operable to . . . estimate available advertisement inventory," as recited in amended independent claim 34.

For at least the above-cited reasons, it is respectfully submitted that Muret in view of Langheinrich fails to teach or suggest all of the limitations set forth in amended independent claim 34. Accordingly, Muret in view of Langheinrich fail to teach or suggest all of the limitations of this claim. As such, Applicants respectfully submit that claim 34, as amended, overcomes the 35 U.S.C. § 103(a) rejection thereof. Accordingly, Applicants respectfully request the 35 U.S.C. § 103(a) rejection of claim 34 be withdrawn. Each of dependent claims 35-49 depends, either directly or indirectly, from amended independent claim 34 and, accordingly, it is respectfully submitted that these claims are non-obvious over Muret in view of Langheinrich for at least the above-cited reasons. As such, withdrawal of the 35 U.S.C. § 103(a) rejection of these claims is respectfully requested as well. Each of claims 35-49 is believed to be in condition for allowance and such favorable action is respectfully requested.

**CONCLUSION**

For at least the reasons stated above, claims 1, 2, 4-15, 18-24, 26-31, and 33-49 are now believed to be in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned – 816-474-6550 or kadsmith@shb.com (such communication via email is herein expressly granted) – to resolve the same.

The fees for a one-month extension of time and a Request for Continued Examination are submitted herewith by way of electronic payment. It is believed that no additional fee is due. However, if this belief is in error, the Commissioner is hereby authorized to charge any amount required, or credit any overpayment, to Deposit Account No. 19-2112, referencing attorney docket number MFCP.145676.

Respectfully submitted,

/ Kristin D. Smith /

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